WHAT IS CLAIMED IS:

1. A device for filling a cigarette tube with tobacco, comprising:

a hopper for holding loose tobacco;

a movable metering member for moving loose tobacco from the hopper to a compression chamber;

a moveable compression member for compressing the loose tobacco in the compression chamber; and

a movable injection member for injecting the compressed tobacco from the compression chamber to a cigarette tube in communication with the compression chamber.

2. The device of claim 1, wherein the metering member, the compression member, and the injection member are respectively automated in their movement by a metering motor, a compression motor, and an injection motor.

3. The device of claim 1, further comprising a first switch actuatable by the compression member for determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

4. The device of claim 3, further comprising a second switch for determining whether the compression member has moved to a compression position.

5 . The device of claim 4, further comprising a control unit for querying the first switch only after the second switch has been engaged.

6. The device of claim 2, wherein compression member is moveable along a first axis to a compression position, and wherein the compression member is coupled to the compression motor by a spring which allows compression position to vary along the first axis in response to a load provided by the tobacco in the compression chamber.

7. The device of claim 6, wherein the variance in the compression position in response to the load selectively changes the status of a first switch.

8. The device of claim 7, further comprising a second switch for determining whether the compression member has moved to a compression position.

9. The device of claim 8, further comprising a control unit for querying the first switch only after the second switch has been engaged.

10. The device of claim 1, further comprising means for determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

11. The device of claim 2, wherein the metering member reciprocates through a plurality of strokes to move the loose tobacco from the hopper to the compression chamber.

12. The device of claim 1, further comprising a control unit for automating the movement of the metering member, the compression member, and the injection member in sequence in accordance with an algorithm.

13. The device of claim 12, wherein the algorithm is further capable of assessing whether a sufficient quantity of tobacco has been compressed in the compression chamber.

14. The device of claim 13, wherein the algorithm provides for additional metering by the metering member if an insufficient quantity of tobacco has been assessed.

15. The device of claim 1, wherein the metering member is automated in its movement by a first motor, and wherein the compression and injection members are automated in their movement by a second motor.

16. The device of claim 15, wherein the second motor drives an arm which moves the injection member after moving the compression member.

17. The device of claim 1, wherein the metering member is automated in its movement by a metering motor.

18. The device of claim 17, wherein the compression member and injection member are manually moveable.

19. The device of claim 18, wherein the compression member and injection member are manually moveable by a rotatable crank arm.

20. The device of claim 19, wherein rotation of the crank arm moves the injection member after moving the compression member.

21. The device of claim 1, wherein the metering member, compression member, and injection member are manually moveable.

22. The device of claim 21, wherein the compression member and injection member are manually moveable by a rotatable crank arm.

23. The device of claim 22, wherein rotation of the crank arm moves the injection member after moving the compression member.

24. The device of claim 1, wherein the metering member reciprocates through a plurality of strokes to move the loose tobacco from the hopper to the compression chamber.

25. The device of claim 24, wherein the metering member is moveable by a motor.

26. The device of claim 24, wherein the metering member is moveable by a rotating crank arm.

27. The device of claim 1, wherein the metering member, the compression member, and the injection member are moveable along axes that are all orthogonal to each other.

28. The device of claim 1, wherein the compression member is coupled to a gripping member for firmly holding the cigarette tube in communication with the compression chamber.

29. The device of claim 1, further comprising a gripping member for firmly holding the cigarette tube in communication with the compression chamber.

30. The device of claim 1, wherein the injection member is coupled to a shuttle.

31. The device of claim 30, wherein the shuttle is spring biased, and injecting the compressed tobacco from the compression chamber to a cigarette tube comprises stretching the spring.

32. The device of claim 30, wherein the shuttle is coupled to a motor to move the injection member.

33. The device of claim 1, further comprising means for biasing the loose tobacco downward in the hopper.

34. A device for filling a cigarette tube with tobacco, comprising:

a hopper for holding loose tobacco;

a movable first member for moving loose tobacco from the hopper to a compression chamber and for compressing the loose tobacco in the compression chamber; and

a movable injection member for injecting the compressed tobacco from the compression chamber to a cigarette tube in communication with the compression chamber.

35. The device of claim 34, wherein the first member and the injection member are respectively automated in their movement by a first motor and an injection motor.

36. The device of claim 34, further comprising a first switch actuatable by the first member for determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

37. The device of claim 36, further comprising a second switch for determining whether the first member has moved to a compression position.

38. The device of claim 37, further comprising a control unit for querying the first switch only after the second switch has been engaged.

39. The device of claim 35, wherein first member is moveable along a first axis to a compression position, and wherein the first member is coupled to the first motor by a spring which allows compression position to vary along the first axis in response to a load provided by the tobacco in the compression chamber.

40. The device of claim 39, wherein the variance in the compression position in response to the load selectively changes the status of a first switch.

41. The device of claim 40, further comprising a second switch for determining whether the first member has moved to a compression position.

42. The device of claim 41, further comprising a control unit for querying the first switch only after the second switch has been engaged.

43. The device of claim 34, further comprising means for determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

44. The device of claim 35, wherein the first member reciprocates through a plurality of strokes to move the loose tobacco from the hopper to the compression chamber.

45. The device of claim 34, further comprising a control unit for automating the movement of the first member and the injection member in sequence in accordance with an algorithm.

46. The device of claim 45, wherein the algorithm is further capable of assessing whether a sufficient quantity of tobacco has been compressed in the compression chamber.

47. The device of claim 46, wherein the algorithm provides for additional metering by the first member if an insufficient quantity of tobacco has been assessed.

48. The device of claim 34, wherein the first member and injection member are manually moveable.

49. The device of claim 34, wherein the first member reciprocates through a plurality of strokes to move the loose tobacco from the hopper to the compression chamber.

50. The device of claim 34, wherein the first member and the injection member are moveable along axes that are orthogonal to each other.

51. The device of claim 34, further comprising a gripping member for firmly holding the cigarette tube in communication with the compression chamber.

52. The device of claim 34, wherein the injection member is coupled to a shuttle.

53. The device of claim 34, further comprising means for biasing the loose tobacco downward in the hopper.

54. The device of claim 34, wherein the compression chamber is essentially cylindrical and has a gap on its upper surface, and wherein the first member has an edge which interfaces with the compression chamber at the gap.

55. The device of claim 54, wherein the edge of the first member is semicircular.

56. A method for filling a cigarette tube with tobacco, comprising not necessarily in sequence:

metering loose tobacco from a hopper to a compression chamber;

compressing the loose tobacco in the compression chamber; and

injecting the compressed tobacco from the compression chamber to a cigarette tube in communication with the compression chamber.

57. The method of claim 56, wherein the metering, compressing, and injecting steps are respectively automated by a metering motor, a compression motor, and an injection motor.

58. The method of claim 56, further comprising assessing the status of a first switch during compression to determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

59. The method of claim 58, further comprising assessing the status of a second switch to determining whether the compression is complete.

60. The method of claim 59, further comprising querying the first switch only after the second switch has been engaged.

61. The method of claim 57, wherein compression is performed by a compression member moveable along a first axis, and wherein the compression member is coupled to the compression motor by a spring which allows the position of the compression member to vary along the first axis in response to a load provided by compressing the tobacco.

62. The method of claim 61, wherein the variance in the position of the compression member in response to the load selectively changes the status of a first switch.

63. The method of claim 62, further comprising assessing the status of a second switch to determining whether the compression is complete.

64. The method of claim 63, further comprising querying the first switch only after the second switch has been engaged.

65. The method of claim 56, further comprising determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

66. The method of claim 56, wherein the metering and compression steps are performed in alternating fashion prior to the injection step.

67. The method of claim 56, further comprising determining whether a sufficient quantity of tobacco has been compressed in the compression chamber during each compression step.

68. The method of claim 56, further comprising automating the metering, compression, and injecting steps in accordance with an algorithm.

69. The method of claim 68, wherein the algorithm further assesses whether a sufficient quantity of tobacco has been compressed in the compression chamber.

70. The method of claim 69, wherein the algorithm provides for an additional metering step if an insufficient quantity of tobacco has been assessed.

71. The method of claim 56, wherein the metering step is automated.

72. The method of claim 71, wherein the compression and injection steps are manual.

73. The method of claim 72, wherein the compression and injection steps comprise rotating a crank arm.

74. The method of claim 73, wherein rotating the crack arm performs the compression step before the injection step.

75. The method of claim 56, wherein the metering, compression, and injection steps are manual.

76. The method of claim 75, wherein the compression and injection steps comprise rotating a crank arm.

77. The method of claim 76, wherein rotating the crack arm performs the compression step before the injection step.

78. The method of claim 56, wherein the metering step comprises reciprocation of a metering member through a plurality of strokes.

79. The method of claim 78, wherein the metering member is moveable by a motor.

80. The method of claim 78, wherein the metering member is moveable by a rotating crank arm.

81. The method of claim 56, wherein the tobacco is metered along a first axis, the tobacco is compressed along a second axis, and the tobacco is injected along a third axis, and wherein the first, second, and third axes are all orthogonal to each other.

82. The method of claim 56, wherein the compression step further comprises affixing the cigarette tube in communication with the compression chamber.

83. The method of claim 56, further comprising, prior to the metering, compression, and injection steps, affixing the cigarette tube in communication with the compression chamber.

84. The method of claim 56, further comprising biasing the loose tobacco downward in the hopper.

85. The method of claim 56, wherein the metering and compression steps are both performed using a first member.

86. The method of claim 85, further comprising automating the movement of the first member and automating the injection step.

87. The method of claim 86, further comprising assessing the status of a first switch during compression to determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

88. The method of claim 87, further comprising assessing the status of a second switch to determining whether the compression is complete.

89. The method of claim 88, further comprising querying the first switch only after the second switch has been engaged.

90. The method of claim 86, wherein compression is performed by a compression member moveable along a first axis, and wherein the compression member is coupled to the compression motor by a spring which allows the position of the compression member to vary along the first axis in response to a load provided compressing the tobacco.

91. The method of claim 90, wherein the variance in the position of the compression member in response to the load selectively changes the status of a first switch.

92. The method of claim 91, further comprising assessing the status of a second switch to determining whether the compression is complete.

93. The method of claim 92, further comprising querying the first switch only after the second switch has been engaged.

94. The method of claim 85, further comprising determining whether a sufficient quantity of tobacco has been compressed in the compression chamber.

95. The method of claim 85, further comprising reciprocating the first member through a plurality of strokes.

96. The method of claim 85, further comprising automating the movement of the first member and automating the injecting step in accordance with an algorithm.

97. The method of claim 96, wherein the algorithm assesses whether a sufficient quantity of tobacco has been compressed in the compression chamber.

98. The method of claim 97, wherein the algorithm provides for additional metering by the first member if an insufficient quantity of tobacco has been assessed.

99. The method of claim 85, wherein the first member and injection member are manually moveable.

100. The method of claim 85, wherein the first member is moveable along a first axis, and wherein the tobacco is injected along a second axis, and wherein the first and second axes are orthogonal to each other.

101. The method of claim 85, further comprising biasing the loose tobacco downward in the hopper.

102. The method of claim 85, wherein the compression chamber is essentially cylindrical and has a gap on its upper surface, and wherein the first member has an edge which interfaces with the compression chamber at the gap.

103. The method of claim 102, wherein the edge of the first member is semicircular.

104. The method of claim 56, wherein the tobacco is injected only after verification that the compressed tobacco in the compression chamber is of a suitable quantity.